

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 82-64

WASTE DISCHARGE REQUIREMENTS FOR:

International Disposal Corp. of California and Browning-Ferris Industries
Newby Island Class II-2 Solid Waste Disposal Site
San Jose, Santa Clara County

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The Newby Island Improvement Co. and the San Jose Scavenger Company jointly submitted a Report of Waste Discharge for the Newby Island solid waste disposal site dated April 26, 1972. International Disposal Corp. of California (a wholly owned subsidiary of Browning-Ferris Industries Inc.,) hereinafter called the discharger, has since purchased Newby Island and now operates and maintains the site. On April 15, 1975 the Board adopted Order No. 75-22 for areas #1 and #2 (See Finding 3 below) of the disposal site. On June 16, 1982 the Board adopted Order No. 82-41 which found that all or portions of area #2 is Waters of the United States and wetlands, and prohibited filling of that area until the discharger provided appropriate mitigation.
2. Portions of area #2 are wetlands and waters of the United States. The filling of these portions shall require appropriate mitigation, and shall be regulated by an NPDES permit. These waste discharge requirements shall apply to the entire disposal site, except those portions (33.5 acres) that are wetlands and waters of the United States as shown in Attachment C (see Finding 3).
3. The Newby Island solid waste disposal site is located within the city limits of San Jose in Santa Clara County as shown in Attachments A, B, and C incorporated herein and made a part of this order. As shown in Attachment B the site is composed of two sections: the easterly section (#1) is the presently active portion of the landfill; and the westerly section (#2) is the area into which landfill operations will be expanded. On July 15, 1975 the operator submitted a plan of operation for filling of the entire site (areas 1 and 2). However, this plan does not provide a complete description of the proposed site preparation prior to filling or the specific fill area sequence to be followed.
4. Newby Island was reclaimed from tidal marshland in the late 1800's by construction of a perimeter dike system. The island was in agricultural use as orchard and pasture land until filling commenced in 1930; however, those portions of the site not used for disposal continued to be used for pasture until 1972. The site was operated as an open burning dump until 1956, at which time the operation was converted to a modified sanitary landfill. Some of the perimeter levees of area #2 have had waste material deposited inboard of the levees and cannery waste has been disced in area #2 prior to the 1970's.

5. A site evaluation for Newby Island has been submitted in the form of a report by Emcon Associates dated September 21, 1972, entitled, "Geotechnical Investigation and Waste Management Studies, Proposed Class II-1 Disposal Site, Newby Island, San Jose, California." Additional geotechnical information has been submitted in the report entitled "Stability Evaluation - Newby Island Sanitary Landfill" by Purcell, Rhodes and Associates, dated November 29, 1979. Leachate control and monitoring information was submitted in a report, entitled "Preliminary Excavation Plan - Southern Area" by Purcell, Rhodes and Associates, dated April 1982.
6. The site is on a low lying, flat portion of the Bay Plain bordering the southern limits of San Francisco Bay. Coyote Creek borders the site on the northeast. The area near the site includes alluvial cones and fans but the major portion of Newby Island is underlain by considerable thickness of clay soils. Granular, shallow stream channel deposits exists in the southern portion of the site at depth of approximately 8 to 20 feet. Part of this southern portion has previously been filled with Group 2 solid waste materials. The only useable groundwater of significant quantity occurs at approximately 300 feet below the site below extensive clay deposits. Shallow perched water exists on the site at depths of 2 to 3 feet but the water is of brackish quality. If deposition of waste is proposed below ground surface then the high groundwater and permeable deposits must be considered in the development and approval of any plan to minimize leachate generation and preclude leachate migration.
7. The beneficial uses of groundwaters near the site are domestic and industrial water supply. The beneficial uses of the waters of Coyote Creek and San Francisco Bay are:
 - Habitat and resting for waterfowl and migratory birds
 - Fish Habitat
 - Recreation, including swimming
 - Navigation
 - Esthetic enjoyment
8. Area #1 of this disposal site meets the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification as a Class II-2 disposal site to receive Group 2 waste and Group 3 waste. Upon documented completion, as required in Provision C.5 of this Order, of all required plans, improvements, or submittals, that portion of area #2 to be filled and covered by these requirements will also meet the above criteria for classification as a Class II-2 disposal site to receive Group 2 waste and Group 3 waste.
9. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on July 21, 1982 and this Order implements the water quality objectives stated in that plan.

10. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
11. The Board, in a public hearing held on November 17, and December 15, 1982, heard and considered all comments pertaining to the discharge.
12. This Order authorizes the continued operation of a privately owned Class II-2 solid waste disposal site. Such activity constitutes only minor modifications to land and is thereby exempt from the provisions of the California Environmental Quality Act in accordance with Section 15104, Chapter 3, Title 14, California Administrative Code.
13. The U.S. Army Corps of Engineers has determined that approximately 3.9 acres of area #2 are navigable waters of the United States and therefore subject to a Corps Permit pursuant to Section 10 of the River and Harbor Act of 1899. The Corp has further determined that the proposed discharge of solid waste to area #2 does not require a Corp Permit under section 404 of the Clean Water Act as the waste does not constitute "fill material".
14. Since there are waters of the United States, (as shown on Attachment C) that are not covered by this order within area #2 the Board finds that it will be necessary for the discharger to prevent migration of waste or leachate into these waters of the United States or demonstrate that waste disposal to these waters of the United States is permitted pursuant to an NPDES Permit prior to the disposal of any wastes within the portion of area #2 covered by this order.

IT IS HEREBY ORDERED, that the discharger and any other persons that shall own the land or operate this landfill shall comply with the following:

A. Prohibitions

- The disposal of wastes shall not create a pollution or nuisance as defined in Section 13050(1) and (m) respectively, of the California Water Code.
1. Group 1 wastes shall not be placed in or allowed to contact ponded water from any source whatsoever, nor shall Group 1 wastes be disposed of in any position where they can be carried from the disposal site and discharged into waters of the State or United States which are outside of the authorized disposal area covered in this order unless such disposal or discharge is allowed by another Order and full compliance with this other Order is achieved.
 2. Group 2 wastes shall not be placed in or allowed to contact ponded water from any source whatsoever, nor shall Group 2 wastes be disposed of in any position where they can be carried from the disposal site and discharged into waters of the State or United States which are outside of the authorized disposal area covered in this order unless such disposal or discharge is allowed by another Order and full compliance with this other Order is achieved.

3. Group 1 wastes and hazardous wastes shall not be deposited or stored at this site.
4. Liquid Group 2 wastes or high moisture content Group 2 waste shall not be discharged, except at the expressed written approval of the Executive Officer and then, only upon demonstration by the discharger that such disposal will not adversely affect the ability of the site to contain wastes and leachate.
5. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
6. Leachate from Group 2 wastes and ponded water containing leachate or in contact with refuse shall not be discharged to waters of the State or the United States which are outside of the authorized disposal area covered in this Order unless such disposal or discharge is allowed by another Order and full compliance with this other Order is achieved.
7. The discharge of wastes to those areas identified by the U.S. Army Corps of Engineers as subject to a Section 10 permit is prohibited until the Corps issues such a permit.
8. The discharge of waste into the portions of area #2 covered by this order is prohibited until the Executive Officer approves in writing a report submitted by the discharger that documents to the Executive Officer's satisfaction compliance with Board Finding 14 of this order. If the Executive Officer fails to respond in writing to the report within 45 days of its submittal, the report will be deemed approved.

B. Specifications

1. Water used during disposal site operations shall be limited to a minimal amount.
2. The disposal area shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of a 100 year storm.
3. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through Group 2 wastes during disposal operation and for the active life of the site. The perimeter drainage ditches and all other facilities shall be designed to convey the 100 year storm runoff, and withstand differential settlement. These facilities shall be constructed over a natural ground or through lined channels or pipes.

4. For waste fill above the maximum level of regional groundwater vertical and lateral hydraulic continuity with useable groundwater shall be prevented by the presence of a natural clay barrier of at least 5 feet in thickness and a permeability of 1×10^{-6} cm/sec or less on the bottom and sides of disposal areas. If such a natural condition does not exist, an artificial barrier shall be constructed to meet the above specifications.
5. For Group 2 wastes placed below the maximum level of the regional groundwater table the deposited wastes shall be isolated from groundwaters by the construction of a leachate barrier and/or leachate collection system. Leachate levels shall be maintained below level of regional groundwater at all times such that the quality of all waters of the State are protected. The methods to be used to provide this isolation shall be submitted by the discharger at least 45 days prior to the start of construction. Executive Officer approval of the report shall be obtained in writing prior to any commencement of filling.
6. As portions of the site are closed, the exterior surfaces shall be graded to a minimum slope of three percent in order to promote lateral runoff of precipitation and to minimize infiltration of precipitation. In addition, all completed disposal areas shall be covered with a minimum of three feet of uncontaminated material one foot of which is compacted to attain a permeability no greater than 1×10^{-6} cm/sec. A lesser slope, thickness of final cover or permeability may be allowed by the Board upon demonstration that erosion control, percolation control, and coverage of refuse will not be adversely affected. This demonstration shall be part of a site closure plan.
7. The migration of methane gas from the landfill area shall be controlled as necessary to prevent the creation of a nuisance.
8. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place outside of the authorized disposal area:
 - a. Surface Waters

- . Floating, suspended, or deposited macroscopic particulate matter or foam:
- . Bottom deposits or aquatic growths;
- . Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
- . Visible, floating, suspended or deposited oil or other products of petroleum origin.
- . Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological accumulation.

b. Groundwater

The useable groundwater shall not be degraded as a result of the solid waste disposal operation.

9. The discharger shall insure that slope stability of this site is maintained under conditions generated during maximum probable earthquake.

C. Provisions

1. For the existing fill area (#1) the discharger shall comply with all prohibitions and specifications of this Order immediately upon its adoption, except for B.6., B.7. and B.9. For the expansion area (#2) the discharger shall comply with all prohibitions and specifications of this order except for B.7. prior to the placement of any waste in this proposed area.
2. The discharger shall submit a technical report by March 31, 1983 documenting compliance with specification B.6 for those sections of area #1 which are completed or provide a detailed plan and time schedule for achieving compliance. Compliance shall be achieved by September 15, 1983.
3. The discharger shall comply with Specification B.7. for area #1 by submitting a plan with a time schedule by March 31, 1983 to monitor the migration of methane gas from this disposal site, and for area #2 prior to filling.

4. The discharger shall comply with Specification B.9 by submitting a slope stability analysis satisfactory to the Executive Officer which evaluates the current and proposed height and slope of the existing fill. This analysis shall be submitted no later than March 31, 1983. If the analysis indicates that existing slopes are unstable, the March 31, 1983 submittal shall include a plan and time schedule for eliminating the instability at the earliest possible date.
5. The discharger shall submit a technical report at least 45 days prior to planned commencement of areas to be filled in area #2 documenting compliance with all prohibitions and specifications of this Order which includes a filling plan. This report, if acceptable, shall be approved by the Executive Officer prior to the commencement of fill operations. If the Executive Officer fails to respond in writing to the report within 45 days of its submittal, the report will be deemed approved.
6. The discharger shall submit to the Board site closure plans for the existing fill area #1 by March 31, 1983 and for the proposed fill area #2 within one year of commencing fill operations. These plans shall conform to this Board's Resolution 77-7 and the State Water Resources Control Board closure requirements contained in Section 2553.1 and 2553.2 of the California Administrative Code. The plan for the proposed fill area #2 shall include a slope stability analysis demonstrating that, during filling operations and after it is closed, the site will comply with Specification B.9.
7. Reports submitted pursuant to Provisions C.2., C.3., C.4., C.5 and C.6 shall be prepared under the supervision of a registered engineer or certified engineering geologist.
8. The discharger shall file with this Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours or ownership of the disposal area(s).
9. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
10. This Board considers the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control which arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.
11. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program which may be directed by the Executive Officer.

12. Order No. 82-41 is hereby rescinded.

13. The discharger shall permit the Regional Board:

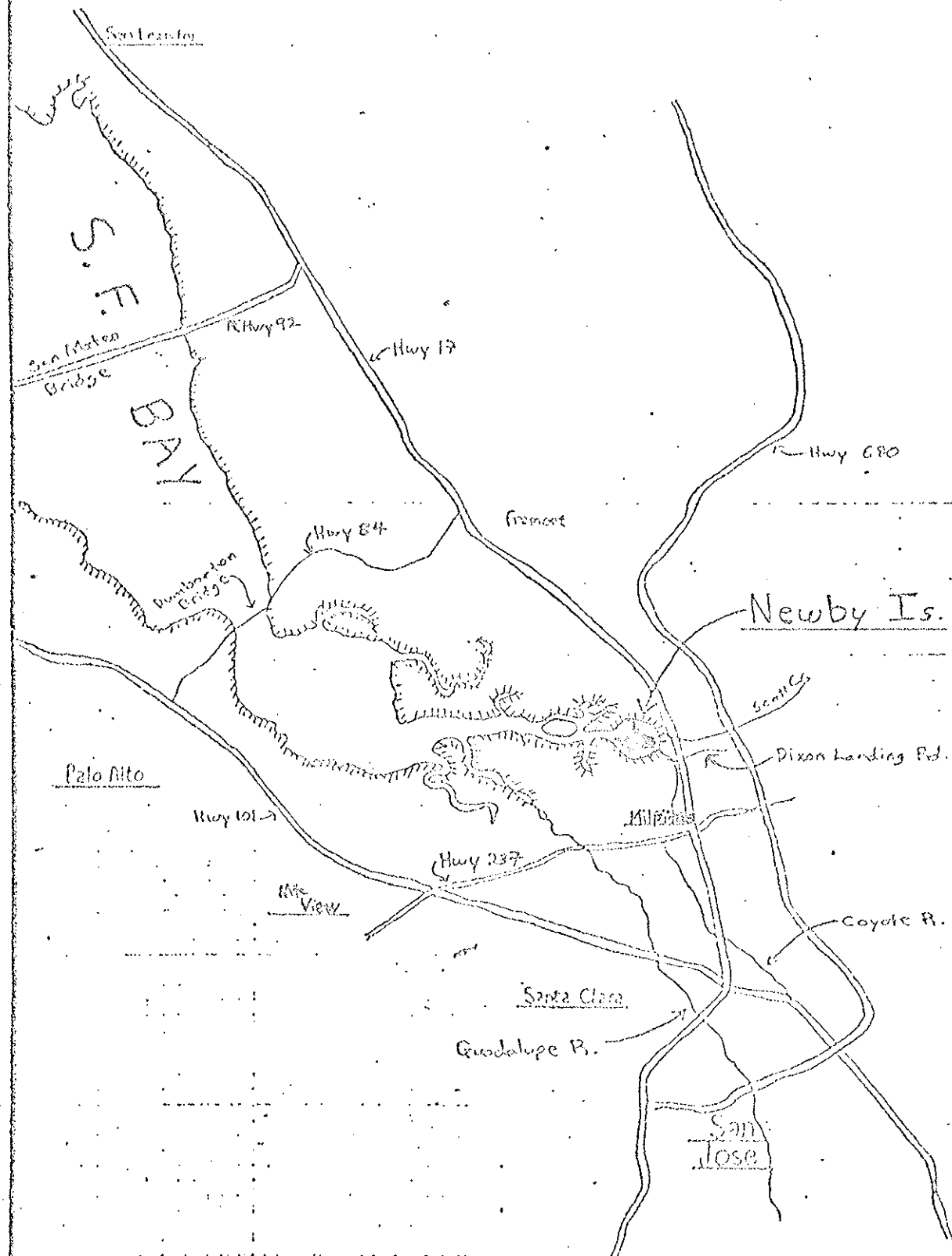
- (a) Entry upon premises on which wastes are located or in which any required records are kept. (Regional Board should be accompanied by BFI personnel.)
- (b) Access to copy any records required to be kept under terms and conditions of this Order,
- (c) Inspection of monitoring equipment or records, and
- (d) Sampling of any discharge.

14. This permit does not authorize commission of any act causing injury to the property of another or the public; does not convey property rights; does not remove liability under federal, state or local laws and does not authorize the discharge of waste without appropriate federal, state, or local permits, authorizations or determinations.

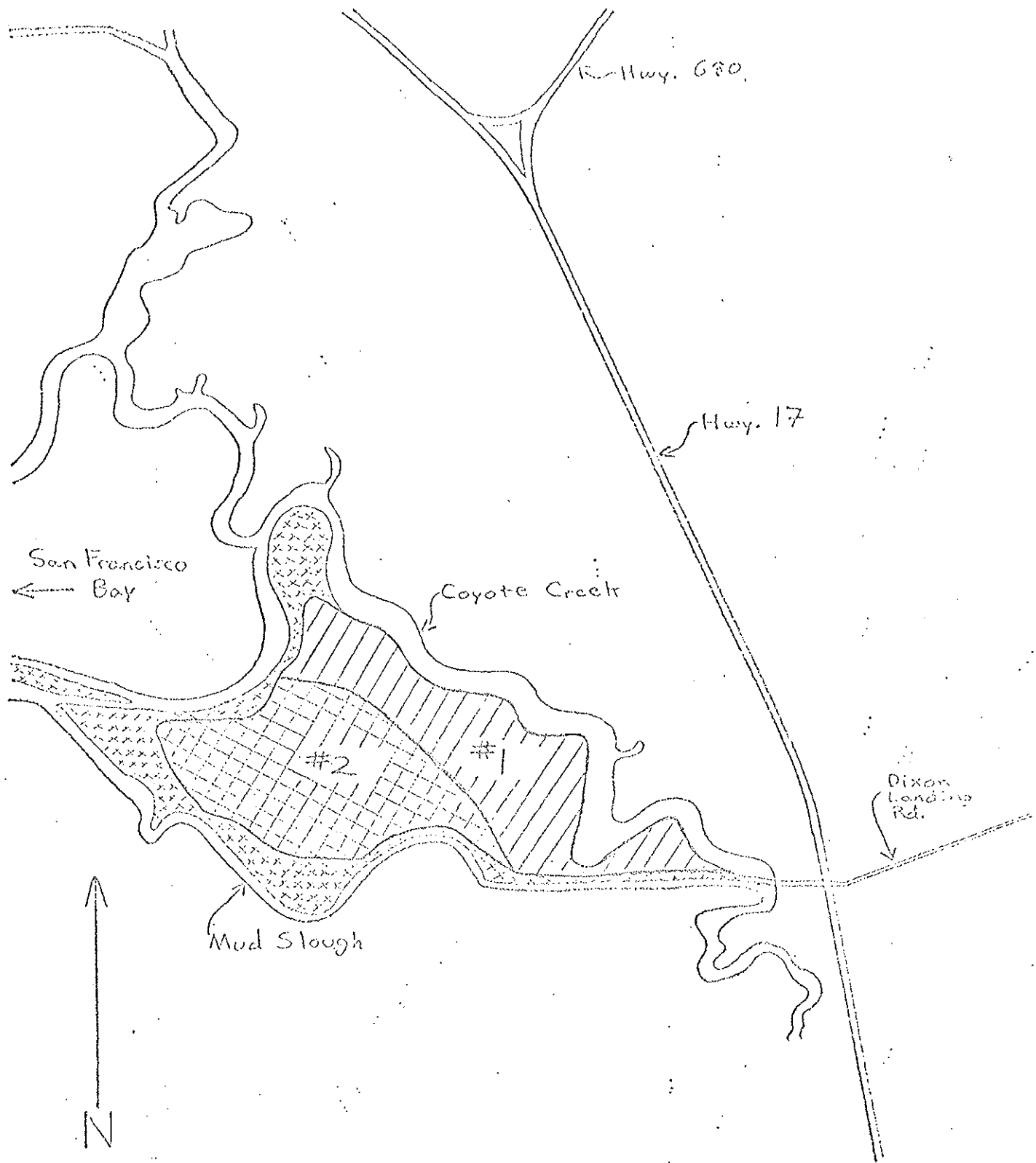
I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board San Francisco Bay Region on, December 15, 1982.

FRED H. DIERKER
Executive Officer

Attachments:
A, B, & C



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO Bay Region
Newby Island - International Disposal
Corp. of California
Class II-2 Solid Waste Disposal Site
Attachment A ORDER NO. 82-64
DRAWN BY: PWJ DATE: 5/14/82



XXXX = Marsh exterior
 of perimeter levee
 /// = Active area (#1)
 ### = Proposed expansion (#2)

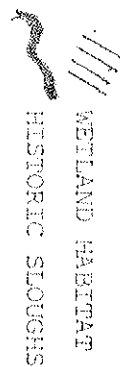
STATE OF CALIFORNIA
 REGIONAL WATER QUALITY CONTROL BOARD
 SAN FRANCISCO BAY REGION

NEWBY ISLAND
 CLASS II-2 LANDFILL

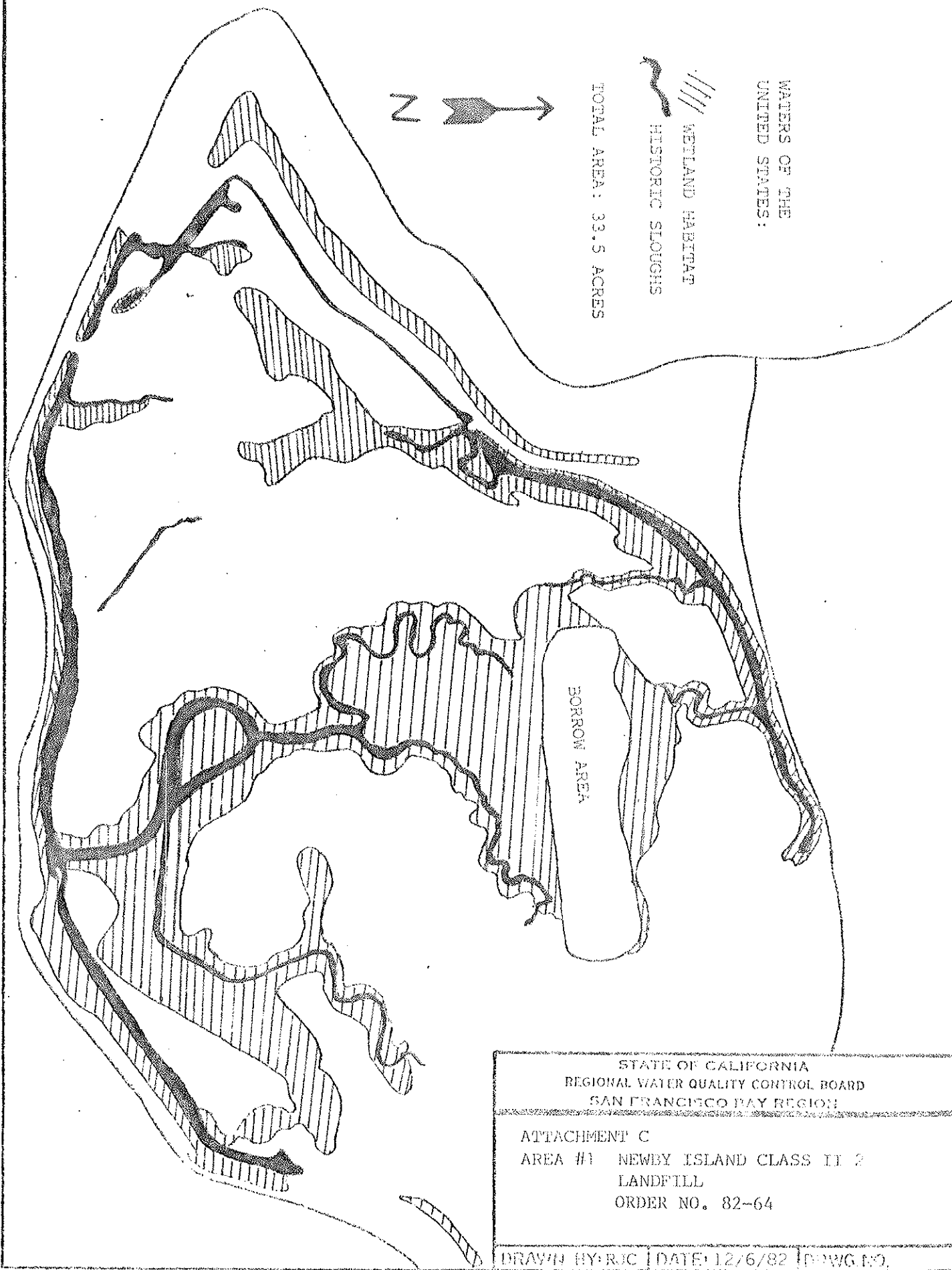
ATTACHMENT B ORDER NO. 82-64

DRAWN BY: PWT DATE 10/18/82

WATERS OF THE
UNITED STATES:



TOTAL AREA: 33.5 ACRES



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ATTACHMENT C
AREA #1 NEWBY ISLAND CLASS II 2
LANDFILL
ORDER NO. 82-64

DRAWN BY: RJC DATE: 12/6/82 DRAWING NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

INTERNATIONAL DISPOSAL CORPORATION AND
BROWNING-FERRIS INDUSTRIES
NEWBY ISLAND CLASS III SOLID WASTE DISPOSAL SITE

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Self-Monitoring Program is issued in accordance with Section C.11 of Regional Board Order No. 82-64.

The principal purposes of a self-monitoring program by a waste discharger are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage , and analyses shall be performed according to most recent version of Standard Methods for the Analysis of Wastewater.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.

2. Receiving waters(s) refers to any water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill, Coyote Creek, and Mud Slough are considered the receiving waters.
3. Standard observations refer to:
 - a. Receiving Waters
 - 1) Discoloration and turbidity: description of color, source, and size of affected area.
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of beneficial use: presence of water associated wildlife.
 - 4) Flow rate.
 - 5) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.
 - b. Perimeter of the waste management unit.
 - 1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of erosion and/or daylighted refuse.
 - c. The waste management unit.
 - 1) Evidence of ponded water at any point on the waste management facility.
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of erosion and/or daylighted refuse.

4. Standard analysis and measurements refer to:

- a. pH
- b. Electrical Conductivity (EC)
- c. Total Dissolved Solids (TDS)
- d. Total Phenols
- e. Chloride
- f. Total Organic Carbon
- g. Nitrate Nitrogen
- h. Total Kjeldahl Nitrogen.
- i. Water elevation in feet above Mean Sea Level.
- j. EPA Method 601, identifying all peaks greater than 1 microgram/liter.
- k. Settleable Solids ml/l/hr

D. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B, and the requirements of Article 5 of Subchapter 15.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.
2. Date and time of sampling.
3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory.
5. Calculation of results.
6. Results of analyses, and detection limits for each analyses.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written self-monitoring reports shall be filed each calendar quarter by the fifteenth day of the following month; with the first report to be submitted by April 15, 1987. In addition an annual report shall be filed as indicated in F.2 The reports shall be comprised of the following:

a. Letter of Transmittal

A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the past quarter and actions taken or planned for correcting the violations, such as operation modifications and/or facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last quarter this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer at the level of vicepresident or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

b. Each report shall include a compliance evaluation summary sheet. This sheet shall contain:

1. The sample mean and the sample variance for all sample sets taken from all compliance points, and shall determine if the difference between the mean of each sample set and the water quality protection standard is significant at the 0.05 level using Cochran's Approximation to the Behrens-Fisher Student's t-test as described in Appendix II of Subchapter 15. The discharger may propose an alternative statistical procedure to be used in making this determination pursuant Section 2555(h)(3) of Subchapter 15. If a statistically significant difference is found this shall be reported as a suspected requirement violation in the letter of transmittal.
2. A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.

c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.

- d. Laboratory statements of results of analyses specified in Part B must be included in each report. The laboratory director shall sign the laboratory statement of analytical results.
 - e. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.
 - f. The quantity and types of wastes disposed of during the past quarter, and the locations of the disposal operations.
 - g. An evaluation of the effectiveness of the leachate monitoring/control facilities. This shall include an evaluation of compliance with Specification B.5 of Order No. 82-64.
2. By January 31 of each year the discharger shall submit an annual report to the Regional Board covering the previous calendar year. This report shall contain:
- a. Tabular and graphical summaries of the monitoring data obtained during the previous year.
 - b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
 - c. A map showing the area, if any, in which filling has been completed during the previous calendar year.
 - d. A written summary of the groundwater analyses indicating any change in the quality of the groundwater.
 - e. An evaluation of the effectiveness of the leachate monitoring/control facilities. This shall include an evaluation of compliance with Specification B.5 of Order No. 82-64.
3. A well drilling log shall be submitted for each groundwater sampling and leachate monitoring well established per this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS .

A. Waste Monitoring

1. Record the total volume and weight of refuse in cubic yards and tons disposed of at the site during the month. Report this information quarterly.
2. Record the volume of fill completed, in cubic yards, showing locations and dimensions on a sketch or map. Report this information quarterly.

B. On-site Observations

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 thru V-'n'	Located on the waste disposal area as delineated by a 500 foot grid network.	Standard observations for the waste management unit.	Weekly
P-1 thru P-'n' (perimeter)	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard observations for the perimeter.	Weekly

A map showing visual and perimeter compliance points (V and P stations) shall be submitted by the discharger in the quarterly monitoring report.

C. Seepage Monitoring

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
S-1 thru S-'n' (seepage)	At any point(s) at which seepage is found occurring from the waste management unit.	Standard observations for the perimeter, and standard analysis other than "i"	Daily until remedial action is taken and seepage ceases.

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
CU-1 (receiving waters, upstream)	Located in Coyote Creek and Mud Slough 200 feet upstream from the upper-most point of seepage discharge(s)	Standard observation for receiving waters and standard analysis other than "i".	Daily, during a seepage event.
CD-1 thru CD-'n' (receiving waters down- stream)	Located in Coyote Creek and Mud Slough 200 feet downstream of seepage discharge(s).	Same as receiving waters upstream.	Daily during a seepage event.

D. Groundwater Monitoring**

STATION	DESCRIPTION	OBSERVATION/ ANALYSIS***	FREQUENCY
G-11 (ground- water back- ground)	To be installed on the East side of Coyote Creek adjacent to the creek and the site access bridge.	Standard analysis other than "k".	Once per quarter.
G-1 thru G-10	As shown on the attached site map.	"	"
"Shallow and Deep wells on the east and west sides of the waste manage- ment unit.	"	"	Annually*

* Water elevation shall be measured quarterly in these wells.

E. Leachate Monitoring**

STATION	DESCRIPTION	OBSERVATION***	FREQUENCY
GR-1 thru GR-'n'	Leachate control facilities including sumps and wells to be installed. (As shown on the attached site map)	Depth of leachate built up at base of land- fill, and volume removed. Elevation of leachate above Mean Sea Level.	Once per quarter and at time of removal.

****Note:** Boring logs and construction details for any of the groundwater or leachate monitoring wells must be supplied for any and all wells to be used to comply with this monitoring program. If this information regarding each well is not submitted the data collected from the wells will not be considered valid. If this information does not exist then the wells will have to be replaced and the boring and construction information submitted pursuant to the requirements of this monitoring program.

The shallow groundwater monitoring wells (G-1 thru G-11) should be constructed to monitor the perched groundwater beneath the site to a depth of approximately 30 feet below Mean Sea Level (MSL). The "Deep" (253 ft.) and "Shallow" (104 ft.) wells on the east and west sides of the site appear to be constructed in the water bearing aquifers beneath the perched groundwater immediately beneath the site. However, the boring and construction details for these wells must also be submitted.

All leachate monitoring wells (GR-1 thru GR-'n') should be installed through the waste fill into the underlying natural soils, and screened the entire length. In the older areas of the fill the bottom of the wells should be approximately one to five feet below MSL. In areas of the fill that have been excavated below MSL the bottom of the leachate wells should be at the elevation of the bottom of the excavation.

*****Note:** The first round of analysis for all G and GR wells shall include analysis of aqueous samples for all priority pollutant heavy metals, using EPA approved methods, and organic compounds using EPA methods 624 and 625.

F. Surface Runoff Monitoring

STATION	DESCRIPTION	OBSERVATION/ ANALYSIS	FREQUENCY
SR-1 thru SR-'n'	At any point where runoff is discharged from the site.	Standard observations for receiving waters and perimeter and standard analysis other than "b, d, e, i, and j".	Once per quarter.

2. CONTINGENCY REPORTING

A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with this Board within five days. This report shall contain the following information: 1) a map showing the location(s) of discharge, 2) approximate flow rate, 3) nature of effects; i.e. all pertinent observations and analyses, and 4) corrective measures underway or proposed.

3. CONTINGENCY MONITORING

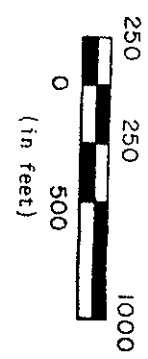
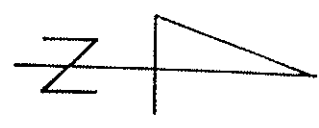
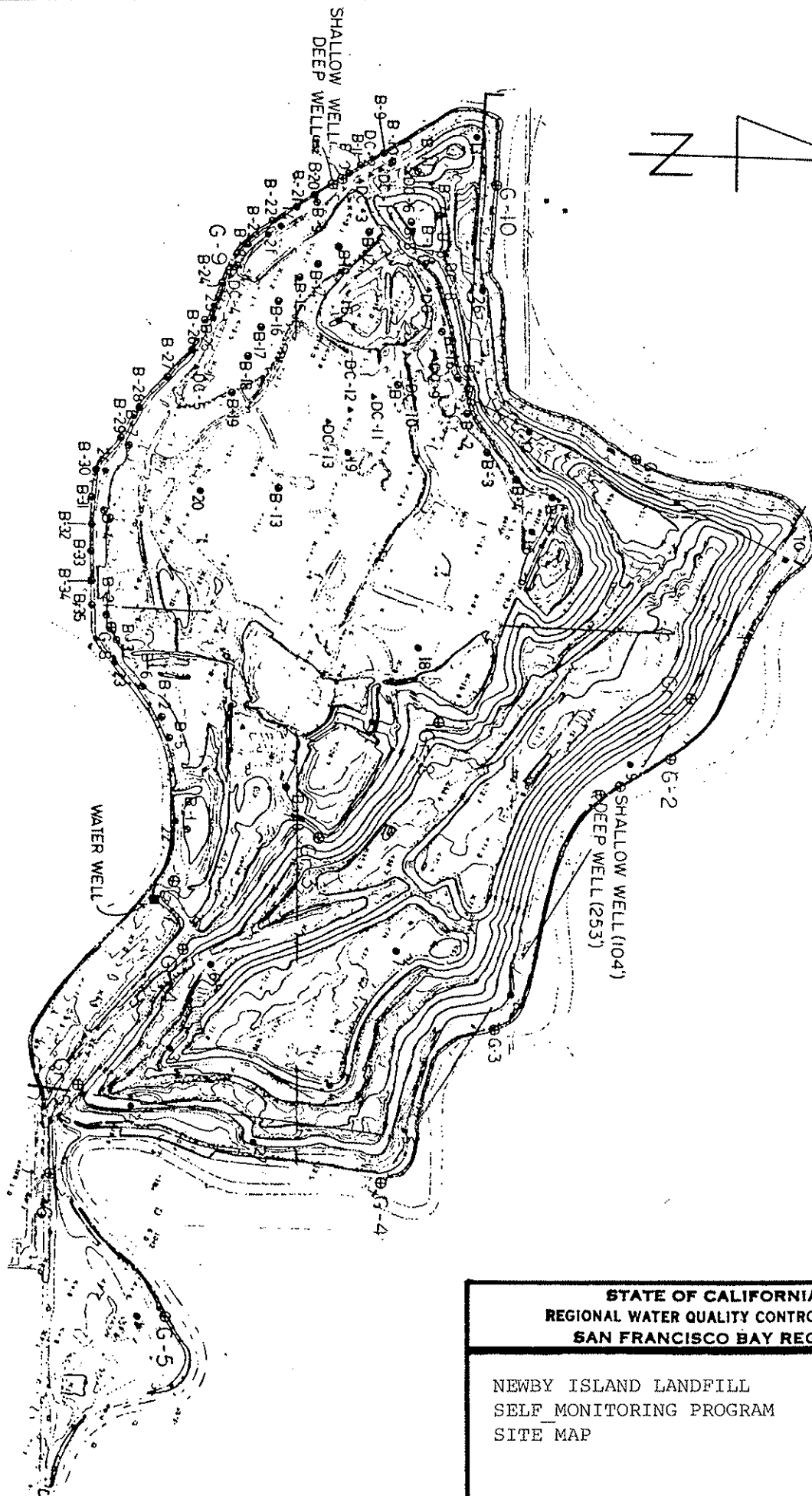
A. Methane gas monitoring probes shall be installed at the site boundary nearest any structure that is constructed within 1000 feet of the Waste Management Facility. These probes shall be monitored at least once per quarter and more frequently as determined at the time of installation, and results of such monitoring reported in the quarterly self-monitoring reports.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 82-64.
2. Is effective on the date shown below.
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the discharger.


Roger B. James
Executive Officer

November 24, 1986
Date Ordered



STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION		
NEWBY ISLAND LANDFILL SELF MONITORING PROGRAM SITE MAP		
DRAWN BY:	DATE:	DRWG. NO.